

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-20 without prejudice or disclaimer.

Please add new claims 21-41.

Following entry of these amendments claims 21-41 are pending in the
5 present application.

21. (New) A method of managing a write request from a first source node
in a storage network to a first storage node in the storage network,
comprising:

10 if there is an available communication path between the first source
node and the first storage node, then executing the write request from the
first source node to the first storage node using the available communication
path;

if there is not an available communication path between the first
15 source node and the first storage node, then:

transmitting the write request from the first source node to a
second source node if there is an available communication path from
the first source node to the second source node and an available
communication path from the second source node to the first storage
20 node.

22. (New) The method of claim 21, wherein if executing the write request from the first source node to the first storage node generates a timeout failure, then:

5 transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node.

10 23. (New) The method of claim 22, wherein transmitting the write request from the first source node to the second source node comprises encapsulating the write request.

15 24. (New) The method of claim 21, further comprising executing the write request from the second source node to the first storage node.

25. (New) The method of claim 24, further comprising transmitting an error message from the second source node to the first source node if the write request fails.

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26. (New) A method of managing a write request from a first source node in a storage network to a mirrored storage data set having a first storage node and a second storage node in the storage network, comprising:
- if there are available communication paths between the first source node and both the first storage node and the second storage node in the mirrored data set, then executing the write request from the first source node to both the first storage node and the second storage node using the available communication paths;
 - if there are no available communication paths between the first source node and the first storage node and the second storage node, then invoking an error routine;
 - if there is an available communication path between the first source node and only one of the first storage node and the second storage node in the mirrored data set, then:
 - executing the write request from the first storage node to the first storage node or the second storage node via the available communication path;
 - transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node or the second storage node.

27. (New) The method of claim 26, wherein if executing the write request from the first source node to the first storage node generates a timeout failure, then:

5 transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node.

10 28. (New) The method of claim 27, further comprising executing the write request from the second source node to the first storage node.

29. (New) The method of claim 26, wherein if executing the write request from the first source node to the second storage node generates a timeout failure, then:

15 transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the second storage node.

20 30. (New) The method of claim 29, further comprising executing the write request from the second source node to the first storage node.

31. (New) A method of performing a surrogate write operation in a storage network, comprising:

receiving, at a second source node, a query from a first source node, wherein the query identifies a target node in the storage network for the surrogate write operation;

transmitting a reply to the first source node, wherein the reply includes a signal component indicating there is an available communication path between the second source node and the target node; and

relaying write operations from the first source node to the target node.

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32. (New) The method of claim 31, further comprising determining whether there is an available communication path between the second source node and the target node.

15 33. (New) The method of claim 31, wherein relaying write operations from the source node to the target node comprises:

receiving an encapsulated write request from the first source node; de-encapsulating the encapsulated write request; and executing the write request from the second node to the target node.

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34. (New) The method of claim 31, further comprising transmitting a failure signal from the second source node to the first source node if the write request from the second source node to the target node fails.

35. (New) One or more computer-readable media comprising logic instructions for managing a write request from a first source node in a storage network to a first storage node in the storage network, that, when executed by a processor, cause the processor to perform operations

5 comprising:

executing a write request from the first source node to the first storage node using an available communication path between the first source node and the first storage node;

10 if there is not an available communication path between the first source node and the first storage node, then:

15 transmitting the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node.

36. (New) The one or more computer-readable media of claim 35, further comprising logic instructions that, when executed by a processor, cause the processor to:

5 determine if executing the write request from the first source node to the first storage node generates a timeout failure, and if so, then to transmit the write request from the first source node to a second source node if there is an available communication path from the first source node to the second source node and an available communication path from the second source node to the first storage node.

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37. (New) The one or more computer-readable media of claim 36, further comprising logic instructions that, when executed by a processor, cause the processor to encapsulate the write request before transmitting the write request from the first source node to the second source node.

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38. (New) One or more computer-readable media comprising logic instructions for performing a surrogate write operation in a storage network that, when executed by a processor, cause the processor to perform operations comprising:

- 5 receiving, at a second source node, a query from a first source node, wherein the query identifies a target node in the storage network for the surrogate write operation;
- transmitting a reply to the first source node, wherein the reply includes a signal component indicating there is an available communication path
- 10 between the second source node and the target node; and
- relaying write operations from the first source node to the target node.

39. (New) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the

15 processor to determine whether there is an available communication path between the second source node and the target node.

40. (New) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the

20 processor to perform operations comprising:

- receiving an encapsulated write request from the first source node;
- de-encapsulating the encapsulated write request; and
- executing the write request from the second node to the target node.

41. (New) The one or more computer-readable media of claim 38, further comprising logic instructions that, when executed on a processor, cause the processor to transmit a failure signal from the second source node to the first source node if the write request from the second source node to the target
5 node fails.